

Estimating the blood pressure measurement frequency for optimum reliability

M. Karami*

A. Biderafsh**

*Assistant Professor of Epidemiology, Social determinants of Health Research Center (SDHRC) & Department of Biostatistics and Epidemiology, Hamadan University of Medical Sciences, Hamadan, Iran

**M.Sc. of Epidemiology, Social determinants of Health Research Center (SDHRC), Urmia University of Medical Sciences, Urmia, Iran

*Abstract

The aim of this cross-sectional, methodological study was to estimate the blood pressure measurement frequency for optimum reliability. The study was conducted on available data from the non-communicable diseases risk factors surveillance system for Hamadan Province in 2009. The sample size was 984. The reliability of systolic and diastolic blood pressure was measured using Intra-Class Correlation (ICC). ICC for twice measurements of systolic and diastolic blood pressure was 0.93 and 0.90, respectively. It seems that application of this method is beneficial to overcome the limitations of repeated measurements including ethical considerations and financial issues.

Keywords: Blood Pressure, Validation Studies, Reproducibility of Results, Epidemiology

Citation: Karami M, Biderafsh A. Estimating the blood pressure measurement frequency for optimum reliability. J Qazvin Univ Med Sci. 2015; 19 (1): 68-71.

Corresponding Address: Manoochehr Karami, Department of Biostatistics and Epidemiology, School of Public Health, Hamadan University of Medical Sciences, Mahdiah St., Hamadan, Iran

Email: ma.karami@umsha.ac.ir

Tel: +98-81-38380762

Received: 5 Apr 2014

Accepted: 3 Jun 2014